



EH&S Reporting Activities for December 2003

Key Activities

- The DOE published draft worker safety & health rulemaking (10 CFR 851) on December 8th. The draft rulemaking is in response to 2002 Congressional direction for the DOE to develop rulemaking for worker safety & health ("OSHA" areas) that would be similar to the current worker radiation rulemaking (10 CFR 835). Office of Assessment staff are currently reviewing for JLab impacts as the comment period is open until early February 2004.
- As of December 31st, there have been **70** days without a lost-time injury. There were no recordable injuries in December. An Accelerator Division EH&S Department technician who suffered a November 11th fall near the South Access Building continued on restricted duty (50 restricted days as of 12/31/03).
- Jefferson Lab must establish an Environmental Management System (EMS) under a new DOE requirement. The EMS will interface with the Jefferson Lab Integrated Safety Management (ISM) System and must be in place by the end of CY 2005. EH&S Reporting will be playing a lead role in this effort. A plan of action to meet this deadline has been drafted.

Occurrence Reporting

- EH&S Reporting screened an FEL event for DOE occurrence reporting (ORPS) in December. The event involved a December 23rd minor electrical shock in the FEL kitchen area. The minor electrical shock was determined to be DOE reportable as a Category 3 "near miss" occurrence (this is the fifth of six DOE reporting levels). There were no OSHA injury recordkeeping implications associated with this minor electrical shock.

Other Activities

- The FY 2003 Shipment Mobility Accountability Collection System (SMAC) information for Jefferson Lab was provided to the DOE. The SMAC information summarizes FY hazardous waste shipments for inclusion in the DOE-wide database. This information is a reporting requirement of the DOE/SURA contract.
- EH&S Reporting developed a draft response to the DOE ES&H Commitment Information Letter for senior management review. Included in the response was current information on the status of FY 2003 Lab EH&S commitments in addition to FY 2004 major EH&S commitments (listed below):
 - The Lab RadCon Manual will be completely revised and updated in FY 2004. The RadCon Manual will also be made available online as part of the Lab EH&S Manual during FY 2004.
 - A special EH&S initiative team on personal protective equipment (PPE) use throughout the Lab will be formed in FY 2004. The Assistant Laboratory Director will chair this PPE special initiative team.

- An additional 'Electrical Short' electrical safety training module will be selected and developed during FY 2004.
- The online General Employee Radiation Training (GERT) will be provided with a number of user-friendly enhancements in FY 2004. These enhancements should increase online GERT utilization.
- The progress of the DOE worker safety and health rulemaking (10 CFR 851) will be followed closely during FY 2004. Special attention will be directed to additional tracking and trending requirements that will require changes in the Lab EH&S tracking system.
- Several Computer workstations will be installed for subcontractor and construction worker use for online EH&S and RadCon training during FY 2004.
- Two Lab-wide EH&S improvement teams will be formed in FY 2004 as part of an overall safety improvement initiative. The two teams are the Electrical Safety Improvement Team, and the Material Handling Safety Improvement Team.
- Complete closeout in FY 2004 of findings/recommendations from the August 2003 Federal OSHA review.
- The Lab Director's all staff EH&S awareness letter was prepared for review.
- Carter Ficklen attended the DOE Quality/Safety workshop sponsored by the Quality & Safety Management Special Interest Group (QSMSIG) on December 2-4 in Las Vegas. The workshop focused on quality assurance issues, recent Price-Anderson enforcement activities, and proposed rulemaking.
- A new Department of Environmental Quality permit that addresses storm water pollution prevention during construction activities that affect more than one acre of land was effective on December 22, 2003.

Work Smart Standards (WSS) Set

- EH&S Reporting is working with the Policy and Manuals Group to incorporate a review of WSS Set items along with EH&S Manual updates.
- Proposed changes to the WSS Set, including using current ANSI standards instead of versions from the 1960s are working their way through the change process.
- Proposed changes to EH&S Manual Chapter 2420 are being processed.

National Environmental Policy Act (NEPA)

- CEBAF and FEL Upgrade Environmental Assessment (EA)
 - EH&S Reporting continued to work with Project Management staff to prepare summaries for the activities planned for inclusion in the proposed 16 GeV EA.
 - Work on the Hall D checklist continued.
- EH&S Reporting is working with other laboratory staff to address other NEPA items, including actions related to the planned tree clearing and northeast pond projects.

December 2003 Accelerator Division EH&S Highlights

Training

- SSG and building 89 safety warden received eye safety and eyewash training from Dr. Chandler. Interesting note: It was stated that JLab has had 18 eye injuries in the last 2 years. Dr. Chandler's experience at other facilities is that they have experienced less than one third that number in over 15 years. One outcome of the eye safety training was the recognition that it would be useful to equip the field workers with bottles of eyewash solution when working out of doors. Said solution is on order. An SOP for the storage, use, and disposal of the bottles is also in the works.
- Assigned Radiation Monitor (ARM) class conducted by RadCon.
- GFCI JIT/"Electrical Short"; T3 working on it - received direction from Ed Martin including outline for presentation
- T3 created new JIT training option: information sheets for workers, create notebooks tailored to work areas—begin with soldering
- Received request from T. Hassler who would like to provide CERT training to the EH&S PMG. T3 coordinating a meeting time with Tom.

EH&S Manual Updates in Progress

- T3 completed EH&S Manual update, Rev. 5.5, online; paper copies around site should be complete by COB on Wednesday, December 17th (waiting for copies to come back from the Copy Center), pdf and html versions posted, all staff e-mail sent, ehslog posted, updated Tracking System for chapters 2240 and 6210
- T3 EH&S Chapter updates:
 - Chapter 6410 Laser Safety ready for Director's Council
 - Chapter 2410 Applicable Regulations and Contractual Commitments sent back to Linda Even for review, waiting for feedback on next step
 - Chapter 5200, Incident/Injury Investigation, sent new version and original mark-up back to John Kelly for review, posted update in Tracking System
 - New entries for Chapters 6210 and 2240 in Tracking System, files seem to have been lost, put in CCPR to Bobby to locate files, if can't find then will have to re-post
 - Chapter 6410 Laser Safety sent to Director's Council Wednesday, December 3rd, due back Wednesday, December 17th
 - Appendix 2200-R1 to reflect Building Manager assignments in Admin Manual, corrected some omissions and wrong phone numbers also
 - Added building manager assignments to EH&S Manual Reference Appendix 2210-R1. Asked author to follow up with HR regarding table of assignments in the Admin Manual. Data was not consistent with the EH&S Manual and needs to be better coordinated.
- Received inquiry about safety warden assignments for trailers 34A-G. Forwarded inquiry to P. Mutton who maintains the master list of safety warden assignments for this area.

EH&S Tracking System

- T3 met with Roy to discuss lab-wide tracking system design. Reviewed EH&S Manual guidance on inspections and assessments. It is anticipated that some aspects of the lab-wide design will drive changes to various sections of the EH&S Manual to include risk assessment.

Accelerator Division EH&S Highlights

December 2003

Task Hazard Analysis and Mitigation: Technical Work Documents

- The JRRP meeting concerning update on He-3/H-3 incident in Hall B. The panel agreed that wording should be added into the RadCon Manual to set policy for 10 mCi limits on H-3 in He-3 bottles in each hall (with a policy on exceptions). However, the consensus was that RCM changes must go through Director's Council.
- T3 Responded to an inquiry from the electrical safety assessment team
- T3 Attended Eng Dept group leaders meeting. Gave an overview of inspection responsibilities as defined in the EH&S Manual. Information was not well received. Forwarded presentation slides to Bob for follow up with Swapan.
- T3 participated in the 2004 Facility Condition Assessment of B89.
- T3 preparing an information sheet on soldering work guidelines. A search on the word "soldering" in EH&S Manual shows the guidance is scattered across various chapters and is primarily captured because of lead soldering concerns. Input from staff is that it's difficult to find needed info when it's spread out like this.
- J. Wilson has agreed to archiving cryo work control documents electronically via EH&S Tracking System. We have received a number of electronic copies from CY 2000 – 2003 over the last week.
- T3 received SRF inquiry on best way to address safety practices for high heat producing plug-in devices.
- T3 Assigned serial number to TOSP from Joe Wilson, Manual Valve Installation Plan for CHL's Original 20,000 Gallon Liquid Nitrogen Dewar's Fill Header, A-03-010-T; posted on DocuShare

Sampling, Surveys, and Support

- T3 reviewed T. Whitlatch's pump cart maintenance plan and is preparing comments. T3 conducted FEL quarterly inspection with SW, Christina Krasche, and Barbara Morgan.
- T3 arranged to have dry rot on B98 pendant repaired. Item has been open since 2/03 and was missed during annual crane ITM.
- SSG noted Hall B controlled access key B2 was broken. The mechanical linkage for the broken key was disabled until the next controlled access. At that time the entire key box, including master, was replaced and tested. A replacement key has been ordered from the manufacturer.
- SSG notes that the new experimental schedule again has us exceeding the 8 month maximum inter-certification interval. Work continues on requirements for injector/north linac separation.
- IH Working on SOP for field use of portable eye-wash bottles. Bottles are in.
- SSG Started on update of the PSS fast electronics training material.
- EH&S Department and Group Leaders filled out Allison's form on PPE.
- IH found paving contractor not using PPE when cutting pavement. D. Paige stopped them and asked that they get appropriate PPE before restarting work.

Facilities

CEBAF

- SSG noted Hall B door striker plate switch was damaged and was swapped with the Hall A switch until a replacement comes in. The replacement is due the week of Dec 7.

Accelerator Division EH&S Highlights December 2003

- SSG started requirements document and modeling for segmentation of injector and north linac PSS segments.
- SSG sent damaged PLC output module (BSY) and router to repair facility for rework and failure mode analysis.
- SSG completed first-cut at updating the PSS display database complete. Installation will wait until the machine is running smoothly, i.e. there are a few hours without an access.
- Hall A Beam Dump Ion Chamber calibration completed successfully for 4 pass beam with no target – current trip point setting at 5000 rad/hr

FEL

- RCG noted neutron radiation spikes reaching 1 mrem/hr on the CARM monitoring the Test Lab 3 (over the penetration recently installed, and filled temporarily with poly beads). Test Lab 3 is posted as a Radiologically Controlled Area until RadCon can enter the FEL and re-evaluate the shielding.
- SSG completed modification of the FEL PSS display screens.

ODH Systems

- SSG generated ODH System Rev 2 of the replacement system requirements.

CMTF/VTA/ITS

- SSG certified the ITS personnel safety system.
- RCG installed one ADM-606 unit in VTA, along with associated cabling and probes – testing for functionality. Upon satisfactory results, manufacturer (Canberra) will send the remaining units for installation

Physics

- Investigating anomalously elevated tritium reading in End Station Discharge Sump
- Added additional radioactive waste from Hall A to inventory of radwaste awaiting shipment, and re-characterized waste

Accidents, Incidents, Lessons Learned, and Tracking

Employee injury investigation approved by senior management. Findings entered in to the EH&S tracking system.

Training / Travel for Staff Development

- K. Mahoney and H. Robertson attended Siemens seminar on new class of dedicated programmable safety technology. Using similar technology we could cut the number of trunk wires in the facility by 90%+. We are looking at two pilot projects. 1.) The ITS upgrade and 2.) Dedicated PSS magnet cut off contactors.
- K. Mahoney H. Robertson to Charlottesville, VA Dec 8-9 for safety
- Posting request for student hire is completed and pending signature from EH&S Dept & Acc Div managers.

Policies & Manual Group Monthly Highlights December 2003

Administrative EH&S Policies, 1000 – 5300 Series

Appendix 2210-R1: Updated the Building Manager names. Asked author to follow up with HR regarding table of assignments in the Admin Manual. Data was not consistent with the EH&S Manual and needs to be better coordinated. As a result, a task force has been organized to assess the problem of data consistency of web accessible JLab information.

6100 Series, Industrial Safety

Chapter 6146, *Tunnel Vehicles*: I was unsuccessful in getting an author re-assignment. I posted a record in the EH&S Tracking System with the former author retaining responsibility in an effort to get this chapter moving forward. Refer to record #**PMG-2003-26**. No progress made this month on the revision.

6300 Series, Ionizing Radiation

The 6300 series chapters were reviewed by the RadCon Group Manager, Erik Abkemeier. Author did not consider changes significant therefore chapters and appendices did not undergo review and approval by Director's Council. Updated documents were posted to the EH&S Manual on December 9, 2003.

6400 Series, Non-Ionizing Radiation

Chapter 6410, *Laser Safety*: The Director's Council returned Chapter 6410 with comments on December 17, 2003. Christina is working on resolution of DC comments with the author before the chapter can be approved and update posted in the Manual. Refer to record # [IA-2002-03-06](#) in the Accelerator Division EH&S Tracking System.

Director's Council Package Rev. 5.5 - November 19, 2003

Included in the package were Chapters 2240, 6145, 6210 and Technical Appendix 6210-T1.

Update: Received all approval sheets for the Nov 19th Director's Council (DC) package. All chapters were uploaded to the online EH&S Manual except Chapter 6145, *Forklifts*. This chapter was returned to the author for resolution of DC comments. Distributed an all staff email notice on the revisions. Also posted an EHSLOG #1185334.

Director's Council Package Rev 5.6 – December 3, 2003

Included in the package were Chapters 2240 and 6410.

Update: Received all approval sheets from the Director's Council. Chapter 2240 has been posted to the EH&S Manual. Need to reconcile several comments made to Chapter 6410 with the author before this chapter can be posted to the EH&S Manual.

Other PMG Initiatives

- A copy of the November highlights can be viewed at: http://docushare.jlab.org/Get/File-8092/November_2003_EH&S_PMG_Highlights.doc
- Currently researching the status of each chapter/appendix for the purpose of updating the color-coded table. Will include a copy of the current table with the January 2004 highlights.